

ABSTRACT

A booster circuit (12) generates a boosted output by boosting a low voltage output supplied as a target to be boosted and feeds back a part of the boosted output, an output by the booster circuit itself, to the
5 booster circuit as operation energy. An auxiliary booster circuit (13) outputs start-up energy generated based on a low voltage output to the booster circuit (12) as start-up energy that is necessary for starting up the booster circuit (12).